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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,594	09/19/2003	Clement Sagayanathan	P16921	7047

28062 7590 01/26/2006

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EXAMINER
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NORRIS, JEREMY C

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/665,594

Applicant(s)

SAGAYANATHAN ET AL.

Examiner

Jeremy C. Norris

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 11, 13, 15, 17, 19-21, 23, 25, 26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 11, 15, 19-21, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 13, 17, 23 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 October 2005 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 15, 19- 21, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,096,425 (Takahashi).

Takahashi discloses, referring primarily to figures 8 & 9, a apparatus comprising: an electronic component body (18); and one or more leads (52) coupled to and extending from the electronic component body, wherein a first lead of the one or more leads comprises a first leg (portion close to 56) and a second leg, the first leg and the second leg defining an first acute angle (54) therebetween a the second leg comprising a first portion defining the first acute angle with the first leg, and a second portion (near 58) defining a second acute angle with the first portion and third portion (near 50)

defining a first obtuse angle with the second portion wherein the third portion is substantially parallel to the first leg, and wherein a length of the third portion that is substantially parallel to the first leg is substantially equal to a thickness of a substrate (24) to which the electronic component body is to be mounted wherein a vertex of the first obtuse angle is to abut the substrate and wherein the substrate is to be disposed between the vertex and the electronic component [claim 11].

Similarly, Takahashi discloses, referring primarily to figures 8 & 9, a method comprising: bending an electronic component body lead (52) to form a first leg (portion close to 56) and a second leg, the first leg and the second leg defining an first acute angle (54) therebetween; and bending the second leg to form a first portion defining the first acute angle with the first leg, and a second portion (near 58) defining a second acute angle with the first portion and a third portion (near 50) defining a first obtuse angle with the second portion wherein the third portion is substantially parallel to the first leg, wherein a vertex of the first obtuse angle is to abut the substrate (24) wherein the substrate is to be disposed between the vertex and the electronic component body. and wherein a length of the third portion that is substantially parallel to the first leg is substantially equal to a thickness of a substrate to which the electronic component body is to be mounted [claims 15, 21], further comprising electrically coupling the lead to an electronic component body (18) [claims 19, 20], further comprising electrically coupling the lead to the substrate [claim 25]

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of US 6,478,616 (Yeh).

Takahashi discloses, referring primarily to figures 8 & 9, an expansion card comprising: a circuit board (24), an electronic component body (18); and one or more leads (52) coupled to and extending from the electronic component body, wherein a first lead of the one or more leads comprises a first leg (portion close to 56) and a second leg, the first leg and the second leg defining an first acute angle (54) therebetween a the second leg comprising a first portion defining the first acute angle with the first leg, and a second portion (near 58) defining a second acute angle with the first portion and third portion (near 50) defining a first obtuse angle with the second portion wherein the third portion is substantially parallel to the first leg, and wherein a length of the third portion that is substantially parallel to the first leg is substantially equal to a thickness of a substrate (24) to which the electronic component body is to be mounted wherein a vertex of the first obtuse angle is to abut the substrate and wherein the substrate is to be disposed between the vertex and the electronic component. Takahashi does not specifically disclose a connector coupled to the circuit board, the connector to connect to a motherboard [claim 26]. However, it is well known in the art to attach a connector to a circuit board, the connector to connect to a motherboard as evidenced by Yeh (col. 6, lines 15-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to attach a connector intended to connect to a motherboard to the circuit board in the invention of Takahashi as is known in the art and evidenced by Yeh. The motivation for doing so would have been to allow for signal transmission to a motherboard.

***Allowable Subject Matter***

Claims 13, 17, 23, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claims 13, 17, 23, and 28 state the limitation "the second leg comprising a fourth portion defining a second obtuse angle with the third portion". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in nor suggested by the prior art.

***Response to Arguments***

Applicant's arguments with respect to claims 11, 13, 15, 19-21, 25, and 26 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 571-272-1932. The examiner can normally be reached on Monday - Friday, 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCSN

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